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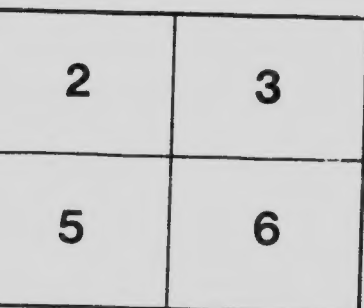
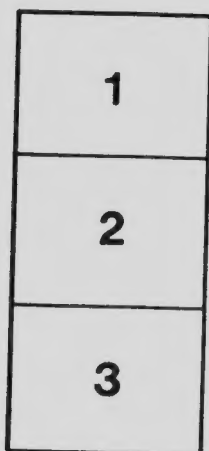
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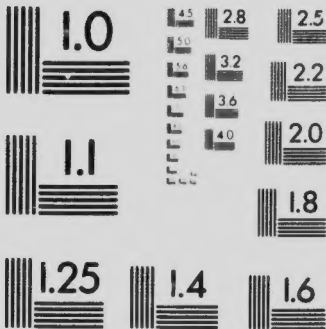
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**PROVINCE OF ALBERTA
DEPARTMENT OF AGRICULTURE
LIVE STOCK BRANCH**

LIVE STOCK PAMPHLET No. 2

(PUBLISHED BY DIRECTION OF HON. DUNCAN MARSHALL,
MINISTER OF AGRICULTURE)

WHY SOWS EAT THEIR PIGS

By W. F. STEVENS, Live Stock Commissioner.

This is a question which the writer is frequently asked, and the answer briefly stated is: "Not enough of phosphorus."

The pig that comes into the world in a normal state possesses bone, sinew, muscle, skin and hair. For the development of these albumina was the principal element used in the formation of the muscles, hair and skin; while lime and phosphorus were employed in the construction of the bones.

The sow that is not supplied with sufficient albumen farrows pigs deficient in muscle and without hair; if her food has been deficient in lime, the bones and sinews of her offspring are small, but if phosphorus is wanting, nature has made provision whereby, to a much greater extent than obtains with our other domestic animals, this element is taken from the tissues of the sow and supplied to the unborn pig.

The extraction of phosphorus from the tissues of the mother develops in her a craving for food that is rich in this ingredient. The intensity of this craving increases in proportion as the sow has been robbed in order to satisfy the needs of her young.

The amount of phosphorus required is very small compared with the other constituents, being about 1 per cent., but it is of such vital importance that a slight reduction below the amount necessary is very soon followed by a serious impairment of the health of the animal.

A sow that has a large amount of freedom usually finds enough of phosphorus bearing food to satisfy her wants. If she is confined in a pen, she is at the mercy of her attendant, who, if he understands the principles of feeding and observes them, will supply the necessary phosphates artificially; if he does not, she goes without; then by the time she is due to farrow, her craving for phosphates amounts almost to a frenzy, and if in addition to this a feverish condition has been brought on by feeding largely on heating foods, such as barley, her condition approaches delirium; the law of self-preservation then over-rides maternal affection, and she is ready to devour anything that instinct tells her contains what her own system requires.

As stated above, a sow that has a considerable amount of freedom will generally find sufficient phosphorus bearing foods to supply her wants, but there are districts in which the soil is deficient in this ingredient, and crops grown on such soils are also wanting in it. Swine growers in such districts should pay special attention to supplying some kind of food that contains a large percentage of phosphoric acid.

(OVER)

Pure phosphoric acid is highly poisonous, and is very unsafe for the unskilled to handle, but when combined with lime, it is known as phosphate of lime, and can be used to good advantage and with comparative safety. A better method of supplying it is to secure feeds that are rich in this substance.

Of our common feeds, bran is perhaps the richest in this ingredient. Digester tankage and ground bone rank first among the supplementary feeds. Peas and wheat are both rich in phosphorus, but the latter being rather low in albumen as compared with peas and oats, is not a first class feed for brood sows. Of our root crops, turnips rank first in phosphorus content.

Not all sows are equally prone to eating their pigs. A nervous, excitable one is much more likely to do so than a milder tempered animal; this is particularly true if she is being cared for by a meddling, fussy attendant.

We sometimes hear it said that if it is the nature of a sow to eat her pigs, she will do so no matter what she has been fed nor how she has been cared for. While the writer is prepared to admit that heredity and habit are both factors to be taken into consideration, his experience as a swine grower does not harmonize with the theory that nothing can be accomplished by proper management and feeding.

During his early career as a swine grower he was an advocate of the pen method of caring for his brood sows, but between the sows eating their young and the pigs dying of "thumps," his losses amounted to about 50 per cent. of the pigs farrowed, while his neighbors, who were giving their sows the run of a pasture lot, were saving from 80 per cent. to 90 per cent. of their increase. During this time a personal friend decided to "go in" for pure breeds, and bought a registered sow, for which he paid, what at that time was thought to be a fancy price. As this sow represented a larger investment than any other animal he possessed, he decided that he would have to give her better care than he did the rest of his herd; so he built a pen specially for her and kept her confined in it. When farrowing time came she ate every pig. He bred her again with the same result. In disgust, he turned her out in a piece of bush pasture with the remainder of his hogs, and in due time she came up with ten healthy, vigorous pigs following her. It was this incident that made the writer a convert to the field method of handling brood sows, and since that day has never lost a pig through being eaten by its dam.

It has long been known by farmers living near the shore, that sows that are fed largely on fish, or fish offal, seldom eat their young. The swine growers of Norway have carried these observations even farther than this. They discovered that the flesh of the pregnant dog fish is particularly valuable as a preventative of this destructive habit, and they use it largely for that purpose.

Now the dog fish, unlike true fish, does not deposit spawn at stated seasons of the year, but brings forth its young fully formed the same as do the mammalia.

Chemists in their researches have found that the flesh of fish of all kinds is richer in phosphoric acid than is that of any of our domestic animals, and that the female dog fish stores up more of it during pregnancy than at any other period of her existence; the amount being approximately 4 per cent. Thus does science discover the reason for things that observant men know to be true, and establishes the correctness of methods practical men have long pursued without being able to explain why they did so.



